



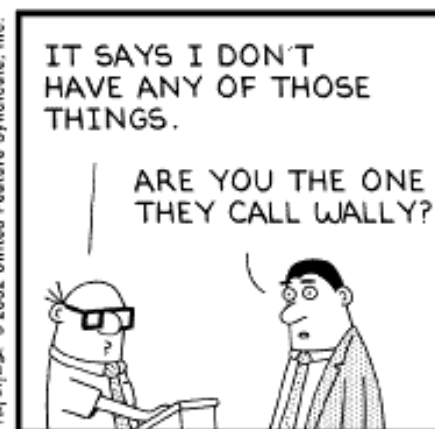
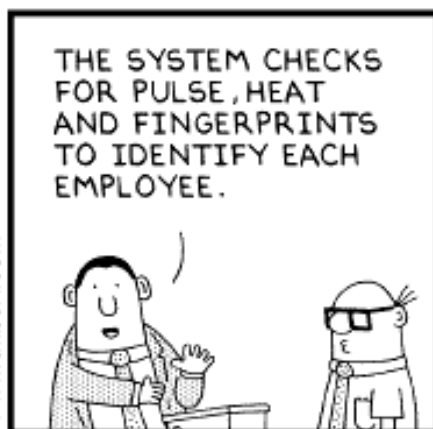
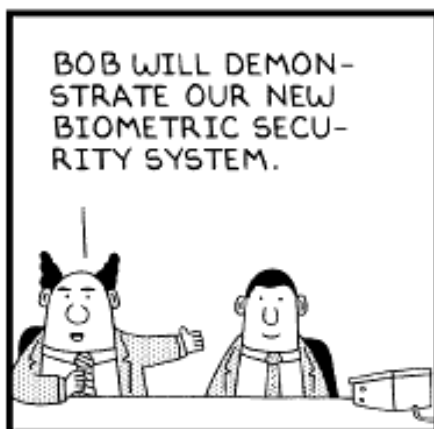
BIMA BIOMETRICS
IDENTITY
MANAGEMENT
AGENCY

Biometrics: Enabling Vision for Biometrics Information, Interoperability, Integration and Technology

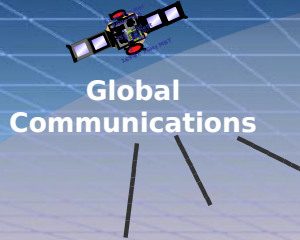
**SOUTHCOM Science, Technology & Experimentation
Conference**
22 February 2012

Dr. Thomas Killion, Director, BIMA





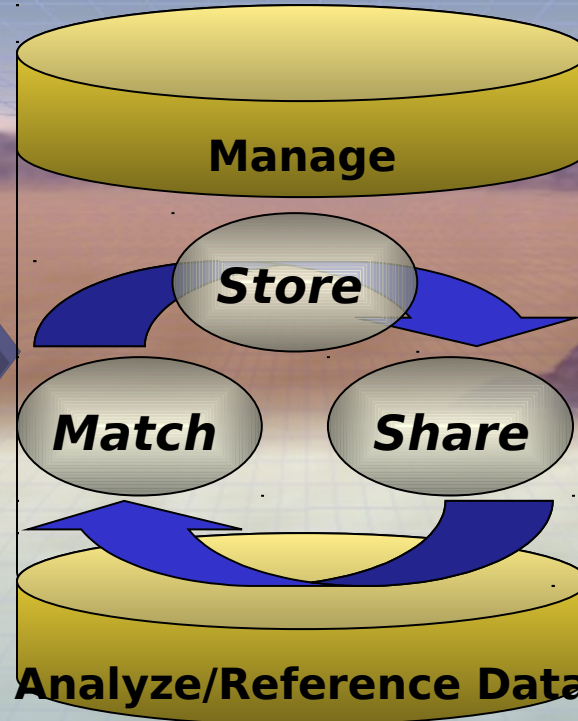
Biometrics in Support of DoD Operations



Biometric Modalities

- Fingerprint
- Iris
- Face
- Palm
- Future Modalities

Collect



Decide
Act

Operational Application

- Populace Management
- Force Protection
- Access
- Surveillance
- Monitoring
- Combat ID



Military Operations and Business Functions

Criminal Investigators

Special Operations Forces

Border Control Points

Medical Operations

Base Access/Force
Protection

HUMINT

Joint, Interagency, Multinational War fighter

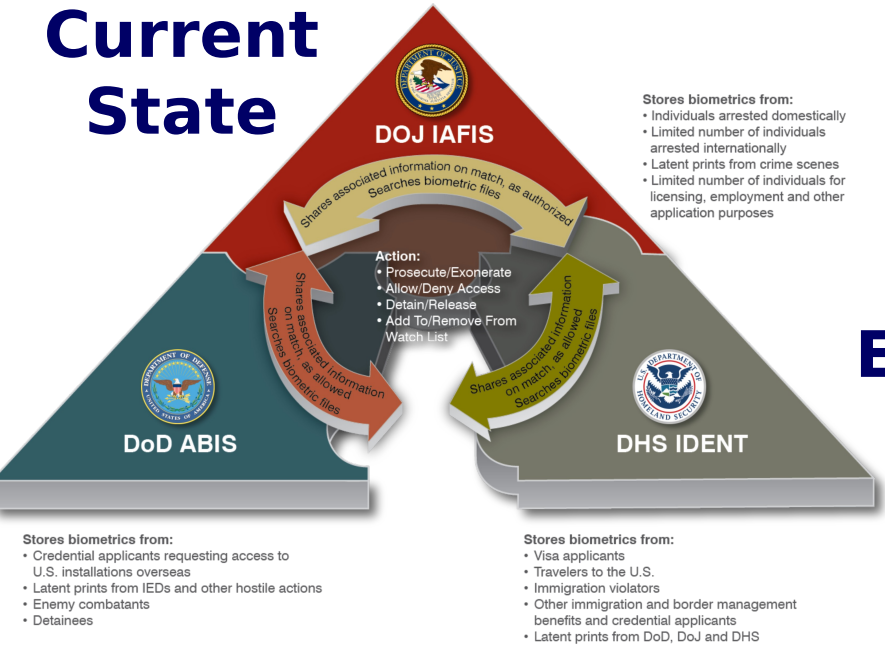
Humanitarian
Relief

Civil Affairs

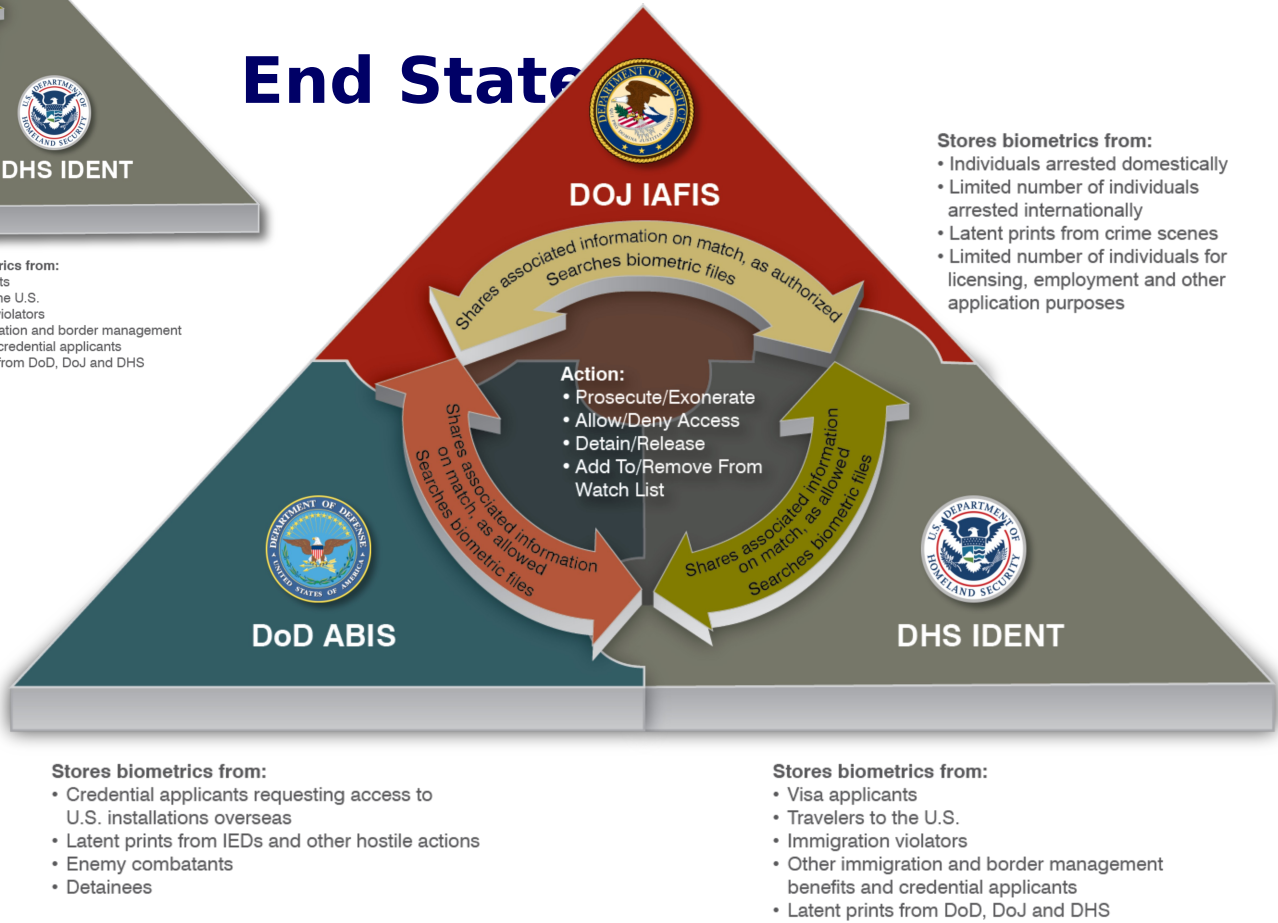
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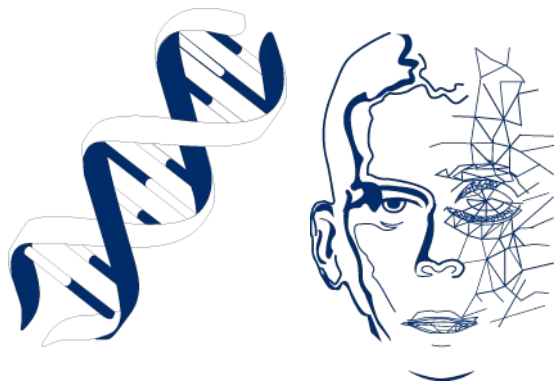
Current State



End State

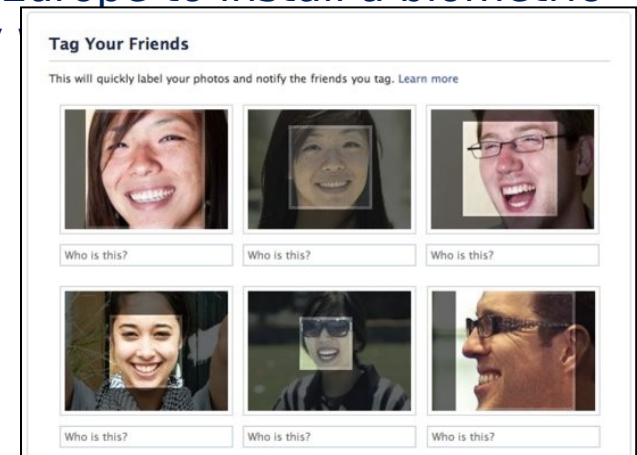


- ▶ New Modalities
 - DNA
 - Vein structure
 - Heart beat
 - Odor
 - Multi-spectral face
- ▶ Human Expertise
- ▶ Advanced algorithms/fusion
- ▶ Stand-off & non-cooperative biometrics
- ▶ Robustness / stability / distinctiveness of characteristics
- ▶ Vulnerability (spoofing / counter-biometrics)
- ▶ Data Management
 - Security
 - Scalability



The Future: Acceptance, Privacy and Policy

- ▶ “Biometrics are unique identifiers, but they are not secrets.”
– Andrew Patrick, National Research Council Canada
- ▶ Accepting biometrics in a commercial arena will likely be dramatically different from acceptance in government applications.
- ▶ At Walt Disney World, biometric measurements are taken from the fingers of guests to ensure that the person's ticket is used by the same person from day to day. Walt Disney World is the nation's largest single commercial application of biometrics.
- ▶ Social media usage: Google “Find My Face” and Facebook “Tag Suggestions.”
- ▶ Poland's cooperative BPS bank says it's the first in Europe to install a biometric ATM -- allowing customers to withdraw money without cash or cards via ‘finger vein’ technology.



Biometrics is an ENDURING CAPABILITY

Even after the completion of Overseas Contingency Operations, Biometrics will remain an enduring capability that enables DoD Stakeholders to execute their missions.

- Biometrics will continue to support the Warfighter across the range of military operations**
- Biometrics capabilities will grow to enable operations in new and evolving mission areas**
- DoD Biometrics will expand our relationships and interaction with Interagency Partners**